

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Fuel-, Lubricating- and Hydraulic Oil Filters**with type designation(s)
PI 214

Issued to

Filtration Group GmbH
Öhringen, Baden-Württemberg, Germany

is found to comply with

DNVGL-OS-D101 – Marine and machinery systems and equipment, Edition January 2018
DNV GL rules for classification – Ships Pt.4 Ch.6 Piping systems**Application :****Product(s) approved by this certificate is/are accepted for installation on vessels classed by DNV GL.****Max. working temp.:** -10°C/ 120°C**Max. working press.:** 100 bar**Sizes:** 300Issued at **Høvik** on **2020-08-12**This Certificate is valid until **2025-08-11**.DNV GL local station: **Augsburg**for **DNV GL**Approval Engineer: **Thomas Wilhelm Juell**

Zeinab Sharifi
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Product description

Material:

- Body: Spheroidal graphin cast iron EN-GJS-450-10 according to EN 1563
- Filter housing: 1.0401, C15/ 1.0402, C22 according to EN10083-2
- Material seals: NBR, FKM, PTFE, Copper

Application/Limitation

The inlet and outlet of the filter are to be fitted with connections where the sealing is not made on the threads.

The approval is related to the strength of the parts subject to pressure, and not the filtering function.

When the filters are installed in the supply line to the main and auxiliary machinery, they are to be arranged that they can be cleaned without interrupting the supply of fuel oil.

Duplex filters used in systems for flammable liquids shall be arranged with means for preventing opening of a filter under pressure and for venting when put into operation (ref. DNVGL-RU-SHIP Pt.4 Ch.6 Sec.5 [1.3]).

Type Approval documentation

Tests carried out

Burst pressure & pulsation test

Production test

Each filter delivered to product certification is to be pressure tested to 1.5 x maximum working pressure in the presence of a DNV GL surveyor.

Marking of product

For traceability to this type approval, each filter is to be marked with:

- Manufacturer's name or trade mark
- Filter type designation
- Operating pressure [bar]
- Operating temperature range[°C]
- Job No./ Serial No.
- Date of manufacturer coded

Periodical assessment

For retention of the Type Approval, a DNV GL surveyor shall perform periodical assessment after two years (+/-90 days) and after 3.5 years (+/-90 days) to verify that the conditions for the approval are complied with. Reference is made to DNVGL-CP-0338.